

MECHANISMS OF AGEING AND DEVELOPMENT

VOLUME CONTENTS

Volume 66 (1992/3)

Age-related changes of the antigen-specific antibody formation in vitro and PHA-induced T-cell proliferation in individuals who met the health criteria of the Senieur protocol G.E. De Greef, G.J. Van Staalduinen, H. Van Doorninck, M.J.D. Van Tol and W. Hijmans (Leiden, The Netherlands)	1
Influence of ageing on antibody formation in vivo after immunisation with the primary T-cell dependent antigen <i>Helix pomatia</i> haemocyanin G.E. De Greef, M.J.D. Van Tol, C.G.M. Kallenberg, G.J. Van Staalduinen, E.J. Remarque, Y.I. Tjandra and W. Hijmans (Leiden and The Hague, The Netherlands)	15
Serum immunoglobulin class and IgG subclass levels and the occurrence of homogeneous immunoglobulins during the course of ageing in humans G.E. De Greef, M.J.D. Van Tol, J.W.K. Van Den Berg, G.J. Van Staalduinen, C.J. Janssen, J. Radl and W. Hijmans (Leiden, The Netherlands)	29
The dynamics of aging and mortality in the united states, 1900-1988 J.E. Riggs (Morgantown, WV)	45
The effects of exercise mode, swimming vs. running, upon bone growth in the rapidly growing female rat A. Snyder, J.R. Zierath, J.A. Hawley, M.D. Sleeper and B.W. Craig (Cape Town, South Africa; Milwaukee, WI; Stockholm, Sweden; Buffalo, NY; Muncie, IN)	59
Age related decline in the expression of proliferating cell nuclear antigen in human diploid fibroblasts C.A. Stewart and R.T. Dell'orco (Ardmore, OK)	71
Oral choline alfoscerate counteracts age-dependent loss of mossy fibres in the rat hippocampus A. Ricci, E. Bronzetti, J.A. Vega and F. Amenta (Rome, Italy; Oviedo, Spain)	81
Effect of traditional Chinese herbal medicines on the pharmacokinetics of Western drugs in Sprague-Dawley rats of different ages (II): aminophylline-Huan Shao Tan and aminophylline-pu Chung Yi Chi Tang S.-Y. Lin, S.-J. Hou, R.-I. Perng, S.-M. Chen and T.-K. Young (Taipei, Republic of China)	93

Epidermal growth factor suppresses in vitro senescence in the ability of human umbilical vein endothelial cells to proliferate, but not in the ability to produce prostacyclin N. Hasegawa and K. Yamamoto (Tokyo, Japan)	107
Letter to the Editor P.N. Karnauchow and A.A. Steele (Ontario, Canada)	115
Alzheimer skin fibroblasts show increased susceptibility to free radicals G. Tesco, S. Latorraca, P. Piersanti, S. Piacentini, L. Amaducci and S. Sorbi (Florence, Italy)	117
Age-related excretion of six glycosidases in rat urine C. Sánchez-Bernal, A. Martín-González, J.A. Cabezas, E. Villar and N. Pérez-González (Salamanca, Spain)	121
Effects of aging on exocrine immune responses to <i>Mycoplasma pulmonis</i> M.J. Steffen and J.L. Ebersole (San Antonio, TX)	131
Effect of aging on macrophage adherence to extracellular matrix proteins M. Iiyama, Y. Shimada, T. Kita and H. Ito (Kyoto, Chiba and Tokyo, Japan)	149
Heavy metals and lipofuscinogenesis. A study on myocardial cells cultured under varying oxidative stress M.R. Marzabadi and C.B. Jones (Linköping, Sweden)	159
The effects of age on the pharmacokinetics and biotransformation of theophylline in vivo and in vitro in the Mongolian gerbil (<i>Meriones unguiculatus</i>) J.O. Peggins, T.F. McMahon, M. Weiner and L. Lesko (Washington, DC; Crystal City, VA and Baltimore, MD)	173
Plasmic membranes of hepatocytes and adrenocorticytes in rats of different ages: effect of testosterone V.V. Frolkis, A.L. Kobzar and G.M. Tjukhtin (Kiev, Ukraine)	187
Age-related morphological and morphometrical changes in parvalbumin- and calbindin-immunoreactive neurons in the rat hippocampal formation I. Lolova and M. Davidoff (Sofia, Bulgaria)	195
Homeostasis between lipid peroxidation and antioxidant enzyme activities in healthy human aging M.A. Rodriguez-Martinez and A. Ruiz-Torres (Madrid, Spain)	213
Static and dynamic models of inter-disease competition: past and projected mortality from amyotrophic lateral sclerosis and multiple sclerosis ... S. Neilson, I. Robinsion and M. Hunter (Uxbridge, UK)	223
Accumulation of cardiac lipofuscin in crab-eating monkeys (<i>Macaca fascicularis</i>): the same rate of lipofuscin accumulation in several species of primates	243
M. Nakano, T. Mizuno and S. Gotoh (Nagakute-cho and Inuyama-city, Japan)	

Aging and mortality: manifestations of increasing informational entropy of the genome?	249
J.E. Riggs (Morgantown, WV)	
Age-related changes in homeostasis of inorganic sulfate in male F-344 rats	257
S. Bakhtian, R.E. Kimura and R.E. Galinsky (Salt Lake City, UT)	
A comparison of methods for estimating mortality parameters from survival data	269
D.L. Wilson (Coral Gables, FL)	
Gene expression and aging	283
M.K. Thakur, T. Oka and Y. Natori (Varanasi, India; Tokushima, Japan)	
Compensatory hypertrophy and training effects on the functioning of ageing rat <i>M. plantaris</i>	299
H. Degens, Z. Turek and R.A. Binkhorst (Nijmegen, The Netherlands)	
Author Index	313
Subject Index	315
Volume Contents	319